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East of Katahdin : Ecological Survey of the East Branch Properties of Elliotsville Plantation, Inc., Penobscot County Maine (Executive Summary)

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Executive Summary

An ecological survey was conducted during the summers of 2004 through 2008 to describe and map the significant features of eight properties recently acquired for conservation in Penobscot County, Maine: Deasey Ponds, East Branch, Hunt Farm, Lunksoos, Three Rivers, Sandy Stream, Valley, and Wassataquoik. Together these properties comprise over 74,000 acres (30,000 ha) east of and adjacent to Baxter State Park in the valley of the East Branch of the Penobscot River. These properties are owned by Elliotsville Plantation, Inc., a non-profit 501(c)(3) organization.

The goals of the survey were to (1) enable informed appreciation of the unique features of the properties, (2) highlight the ecological significance of the land and its functioning within the surrounding landscape, and (3) provide baseline data for subsequent development of stewardship plans.

Preeminent among the natural features of these properties is the Penobscot East Branch river system, including its major tributaries, the Seboeis River and Wassataquoik Stream. This complex has been identified as one of the least-developed watersheds in the northeast, eligible for inclusion in the National Wild and Scenic Rivers system. It provides breeding ground for ocean-run Atlantic salmon, as well as habitat for native brook trout. From Matagamon, the East Branch runs 26 miles before the first automobile bridge at Whetstone Falls. In T5R8, it drops 200 ft in 5 miles over a series of spectacular rapids and waterfalls.

Other unique features of the properties described in the report include mountains and mountain views, a fascinating human history, significant geological features, and recreational opportunities and ecotourism.

The ecological survey was carried out over the five summers with the help of a staff assistant and student interns. Together we visited and collected detailed plant inventory

information at 223 data points at approximately 1-km intervals on a Universal Transverse Mercator latitude-longitude grid pattern. This information together with other data sources enabled us to make detailed natural community and cultural area maps using the classification system of the Maine Natural Areas Program for natural communities, and a similar system for silvicultural areas – areas that had been recently logged. We also collected information on the animal species encountered – birds, mammals, amphibians, and reptiles – as well as important habitat features.

In summary, about half of the land area of the East Branch properties described in this report consisted of upland and wetland natural communities, and half of silvicultural areas. Thirty-seven upland and wetland natural community types were identified and mapped. While the most abundant natural community types were the *spruce-northern hardwoods forest*, *beech-birch-maple forest*, and *spruce-fir-broom moss forest* which are widespread in the region, there were many less common community types as well. Three of the natural communities discovered – *spruce-heath barren*, *blueberry-lichen barren*, and *hardwood river terrace forest*, are considered imperiled in Maine. Seven of the other communities found are considered rare. Two rare plants were encountered – purple clematis and fragrant woodfern – and four other rare plants have been reported from the area and may be present but were not located. Besides federally-endangered ocean-run Atlantic salmon, the presence of federally-threatened Canada lynx has been verified. Bald eagle, a species of special concern, is also present.

Despite the degree to which the properties had been harvested or otherwise disturbed in recent years, we were frequently surprised as we visited areas away from the roads by the number and quality of intact small and medium-sized ecosystems, and by the extent of connected younger and older matrix forest. These intact ecosystems are considered to be of great value from a biodiversity perspective, conserving as they do representative species from their respective ecosystem types. Preserving these areas in their natural state will help preserve the species, both known and unknown, which depend on them for habitat. These high quality ecosystems tended to occur in the less common topographic settings such as hilltops and barrens, cliffs and steep slopes, ravines and coves, floodplain forests, and freshwater wetlands and wet basins. There were also outstanding examples of

medium and small upland patch forests found throughout the properties, as well as large blocks of matrix forest, the latter providing habitat for wide-ranging species such as bald eagle, northern goshawk, bobcat, American marten, and black bear.

Although the focus of our survey was on natural communities, the early successional and regenerating areas on the properties were also of importance for biodiversity. Besides providing habitat for common species such as ruffed grouse, white-tailed deer, and snowshoe hare, cut-over areas can also be of importance for less common and even rare species, with federally-threatened Canada lynx being a prime example.

The East Branch properties of Elliotsville Plantation are of ecological significance in and of themselves, but also because of their adjacency to other conserved lands, specifically Baxter State Park, the Wassataquoik Public Reserved Land, the Bureau of Parks and Lands property north of Katahdin Lake, and The Nature Conservancy's Trout Mountain Preserve. Taken together, these properties encompass an enormous block of diverse habitat: forests, wetlands, ponds, rivers and streams, and alpine and subalpine terrain. The sheer size of the conserved properties is without parallel in Maine.

Stewardship of the properties discussed in this report touches on many issues ranging from road maintenance, to forest management, natural and cultural resource protection, and public access and use. The observations made during this survey provide a snapshot of the state of the properties in the 2004 – 2008 time frame which may be used for stewardship planning and to help assess changes that take place over time. The natural community and cultural area maps also provide a record of the state of the properties during the survey period, as do the lists of plants and animals observed. These may also be useful for planning and for future comparison.

Planning and implementing stewardship prescriptions for the EPI East Branch properties will be a challenging but worthwhile undertaking in order to ensure that the unique and ecologically significant features of the properties are preserved while allowing suitable public access for recreational and educational use.